

Jeremy A. Magruder Waisome, Ph.D.

Email: jeremywaisome@gmail.com, Website: jeremywaisome.com

EDUCATION:

Ph.D. Civil Engineering, 2017 – University of Florida, Gainesville

Title: *Evaluation of Asphalt Pavement Interface Conditions to Enhance Long-Term Pavement Performance*, Advisor: Reynaldo Roque, Ph.D.

Graduate Certificate in Sustainable Engineering, 2013 – University of Florida, Gainesville

M.S. Civil Engineering, 2012 – University of Florida, Gainesville

B.S. Civil Engineering, 2010 – University of Florida, Gainesville

PROFESSIONAL EXPERIENCE:

2020-Present: Lecturer, Department of Engineering Education, Herbert Wertheim College of Engineering (HWCOE), University of Florida (UF)

2018-Present: Special Assistant to the Dean in the Division of Graduate Student Affairs, The Graduate School, UF

2019-2020: Postdoctoral Associate, Department of Environmental Engineering Sciences, HWCOE, UF, Supervisor: Elliot Douglas, Ph.D.

2018-2020: Postdoctoral Associate, Department of Computer and Information Science and Engineering, HWCOE, UF, Supervisor: Juan E. Gilbert, Ph.D.

SCHOLARSHIP:

Funding

1. National Science Foundation award entitled: Natural Hazards Engineering Research Infrastructure: Experimental Facility with Boundary Layer Wind Tunnel, Bridge, J.A. (PI), Masters, F.J., Phillips, B.M., Gurley, K.R., Prevatt, D., **Waisome, J.A.M. (senior personnel)**, Funding period: 1/1/2021-9/30/2025, Total funding: **\$1,057,425.00**. UF share: \$1,057,425.00.
2. University of Florida Office of Research award entitled: Engineering while Black: Exploring the Experiences of Black Undergraduate Engineering Students using Photovoice, Hicklin, K. (PI), **Waisome, J.A.M. (co-PI)**, Funding period: 1/1/2021-12/31/2021, Total funding: **\$33,672.00**.

3. National Science Foundation award entitled: Institute for African-American Mentoring in Computing Sciences (iAAMCS), Gilbert, J.E. (PI), Waisome, J.A.M. (Senior Personnel), NSF CISE BPC-A, Funding Period 10/01/2020 - 09/30/2021, Total funding: **\$500,000.00**, UF share: \$374,809.09.
4. National Science Foundation award entitled: Collaborative Research: Human-Centered Computing Scholars: Generation **NEXT** (Need-based, **EX**tensive Support Through Degree Completion), McMullen, K. (PI), Gilbert, J.E., Gardner-McCune, C., **Waisome, J.A.M. (co-PI)**, NSF DUE, Funding period: 3/06/2019 - 4/30/2024, Total funding: **\$922,495.00**. UF Share: \$922,495.00.
5. National Center for Women in Information Technology (NCWIT) award entitled: Modern Figures; A Conversational Podcast Series on Black Women in Computing (Pilot), NCWIT, **Waisome, J.A.M., (co-PI)** and McMullen, K. (co-PI). Funding period: 10/30/2018-04/30/2019, Total funding: **\$99,442.28**. UF share: \$92,442.28.
6. The Florida Department of Transportation award entitled: Evaluation of Asphalt Pavement Interface Conditions for Enhanced Bond Performance, Roque, R. (PI), Zou, J. Hernando, D., **Waisome, J.A.M**, FDOT, Funding period: 2015 – 2017, Total funding: **\$240,000.00**. UF share: \$240,000.00

Publications

Peer Reviewed Journal Articles

1. Park, B., Zou, J., Hernando, D., Roque, R., **Waisome, J.A.M.** (2021). Investigating the Use of Equivalent Elastic Approach to Identify the Potential Location of Bending-Induced Interface Debonding Under a Moving Load. *Materials and Structures*.
<https://doi.org/10.1617/s11527-020-01612-7>
2. Hernando, D., **Waisome, J.A.M.**, Zou, J., and Roque, R. (2018). Identification of Potential Location and Extent of Localized Interface Debonding in the Wheelpath of Asphalt Pavements. *Transportation Research Record*. <https://doi.org/10.1177/0361198118758636>

Peer Reviewed Conference Papers

1. Berry, M.B., Douglas, E.P., Therriault, D.J., **Waisome, J.A.M.** (2020). WIP: Understanding Ambiguity in Engineering Problem Solving. American Society for Engineering Education Virtual Conference.
2. **Waisome, J.A.M.**, Jackson, J.F.L., Gilbert, J.E., (2020). The iAAMCS Ecosystem: Retaining Blacks/African-Americans in CS PhD Programs. *Proceedings of the 2020 IEEE Conference on Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)*, Portland, OR.

3. **Waisome, J.A.M.**, McMullen, K., Smith, T.R., Smarr, S.A, Gilbert, J.E. (2019). Developing Career Self-Efficacy of Researchers in Human-Centered Computing through Scholarship Support. *Proceedings of the 2019 American Society for Engineering Education Annual Conference and Exposition (Minorities in Engineering Division)*, Tampa, FL.
4. **Waisome, J.A.M.**, Gilbert, J.E., Roberts, S.E., McCune, D.B., and Taylor, C. (2017). Building Communities through the Creation of Dialogue. *Proceedings of the American Society for Engineering Education Zone II Conference*, San Juan, Puerto Rico.
5. Hernando D., **Magruder J.A.**, Zou J., Roque R. (2017). Identification of Potential Location and Extent of Localized Interface Debonding in the Wheelpath of Asphalt Pavements. *Transportation Research Board Annual Meeting*, Washington, D.C.
6. Thomas, L.D., Watt, D.L., Cross, K.J., **Magruder, J.A.**, Easley, C.R., Monereau, Y.J., Phillips, M.R., and Benjamin, A.M. (2016). WIP: As Purple is to Lavender: Exploring Womanism as a Theoretical Framework in Engineering Education. *Proceedings of the 2016 American Society for Engineering Education Annual Conference and Exposition (Liberal Education/Engineering & Society Division)*, New Orleans, LA.
7. Hernando D., **Magruder J.A.**, Zou J., Roque R. (2016). Localized Debonding as a Potential Mechanism for Near-Surface Cracking. *8th RILEM International Conference on Mechanisms of Cracking and Debonding in Pavements*, Nantes, France.

Book Chapters

1. Hernando D., **Magruder J.A.**, Zou J., Roque R. (2016). Localized Debonding as a Potential Mechanism for Near-Surface Cracking. In: Chabot A., Buttlar W., Dave E., Petit C., Tebaldi G. (Eds) 8th RILEM International Conference on Mechanisms of Cracking and Debonding in Pavements. *RILEM Bookseries*, vol. 13. Springer, Dordrecht

Non-Peer Reviewed Publications

1. Frierson, H.T., Gilbert, J.E., **Waisome, J.A.M.** (2020). Untapped Computer Scientists. *Science*. DOI: 10.1126/science.abf3892
2. **Waisome, J.A.M.**, Jackson, J.F.L., and Gilbert, J.E. (2018). The iAAMCS Guidelines for Successfully Mentoring Black/African-American Computing Sciences PhD Students. www.iaamcs.org/guidelines.
3. Roque, R., Hernando, D., Park, B., Zou, J., **Waisome, J.A.M.** (2017). Evaluation of Asphalt Pavement Interface Conditions for Enhanced Bond Performance. Florida Department of Transportation Final Report. UF Project 118906. http://www.fdot.gov/research/Completed_Proj/Summary_SMO/FDOT-BDV31-977-37-rpt.pdf.

Presentations

Keynote Speaker/Invited Panelist/ Invited Talks

1. Invited panelist, UF Black Graduate Student Organization. *2021 Martin Luther King Jr. Celebration: Social Justice Through Diverse Lenses*, January 14, 2021, Gainesville, FL.
2. Invited talk, UF Center for Teaching Excellence. *Building Mentoring Capacity*, November 4, 2020, Gainesville, FL.
3. Invited talk, Antiracist Action Bootcamp for Early Career Scholars. *Mentoring as Antiracist Action*, October 23, 2020, Gainesville, FL.
4. Invited talk, UF Research Development. *Writing "Broader Impacts" for NSF Proposals*, October 14, 2020, Gainesville, FL.
5. Invited talk, UF Research Development. *Writing "Broader Impacts" for NSF Proposals*, May 27, 2020, Gainesville, FL.
6. Invited talk, UF Community of Communicators Workshop Series. *Podcasting is for Everyone*, October 17, 2019, Gainesville, FL.
7. Invited talk, UF Early Career Stage Investigator Workshop Part 2. *Creating Broader Impacts*, April 9, 2019, Gainesville, FL.
8. Keynote speaker, Graduate Student Research Day. *Adapt and Overcome: Paving Your Path to Graduation*, April 2, 2019, Gainesville, FL.
9. Keynote speaker, UF Campus Visitation Program. *So You Want to Go to Graduate School At UF: A Guide for Future Gators*, February 12, 2019, Gainesville, FL.
10. Guest speaker, Greenhouse Church: Spreading Motivation and Inspiring Leadership & Excellence (SMILE) Program. *The Importance of Mentorship*, January 16, 2019, Gainesville, FL.
11. Keynote speaker, UF Chapter of NSBE Fall Banquet. *Gator NSBE Fall 2018 Banquet*, December 8, 2018, Gainesville, FL.
12. Invited panelist, Southern Regional Education Board Compact for Faculty Diversity: Institute on Teaching and Mentoring. *Panel for TRIO McNair & SSS Scholars*, October 26, 2018, Arlington, VA.
13. Invited panelist, The National Academies of Science, Engineering, and Medicine Participatory Workshop on Metrics, Models, and Identities in STEMM Mentoring Relationships: What Works and Why? *Mentee Reflection Dinner Talk*, October 8, 2018, Irvine, CA.

14. Guest speaker, UF Ronald E. McNair Scholars Networking Dinner. *Leveraging Graduate School to Build Your Professional Network*, September 6, 2018, Gainesville, FL.
15. Guest speaker, Bridge to the Doctorate Professional Development Workshop. *Experiences in Graduate School at the University of Florida*, August 24, 2018, Gainesville, FL.
16. Keynote speaker, UF Ronald E. McNair Scholars Banquet. *The Struggle Is Real; But So Is the Reward*, April 2, 2018. Gainesville, FL.
17. Guest speaker, A View from the Disciplines: Modeling C.L.A.S.S. (Character, Leadership, Advocacy, Scholarship, and Service) in Research Symposium. *Living the C.L.A.S.S.(Y.) Life in the Academy*, April 2, 2018, Gainesville, FL.
18. Keynote speaker, UF Golden Key Banquet. *Be You: A Story of Leadership at UF*, March 19, 2018, Gainesville, FL.
19. Keynote speaker, I AM S.T.E.M. Camp. *Pressure Makes Diamonds*, August 3, 2017, Gainesville, FL.
20. Keynote speaker, Successful Transition through Enhanced Preparation for Undergraduates Program (STEPUP) Banquet. *Preparation and Persistence: Using STEPUP to become a Successful Gator Engineer*, August 3, 2017, Gainesville, FL.
21. Invited panelist, American Society for Engineering Education. *Diversity Turning Points Panel*, June 27, 2017, Columbus, OH.
22. Keynote speaker, Young Women of Color Empowerment Conference. *QUEENS: Qualified. Unified. Educated. Exemplary. in Nature. Sisters of STEM*, May 2017, Jacksonville, FL.
23. Keynote speaker, Army Corps. of Engineers-Jacksonville District Black History Month Celebration. *Success Always Leaves Footprints-The Crisis in Black Education*, February 2017. Jacksonville, FL.

Other Presentations

1. Waisome, J.A.M. (2020). Workshop presentation: *Tools for Navigating Graduate School*, UF Summer Board of Education, July 28, 2020, (Virtual) Gainesville, FL.
2. Waisome, J.A.M. (2020). Workshop presentation: *Civil Engineering Materials – Civil Engineering Rocks*, Thompson Earth Systems Institute – Scientist in Every Florida School, June 9, 2020, (Virtual) Miami, FL.
3. Williams, R.M., **Waisome, J.A.M.**, McMullen, K., Drobina, E. (2019). Workshop presentation: *The Fallacy of Objectivity: Leveraging Situated Knowledges to Advance*

Computing for Social Justice, ACM Richard Tapia Celebration on Diversity in Computing Conference, September 19, 2019, San Diego, CA.

4. **Waisome, J.A.M.**, McMullen, K. (2019). Birds of a feather presentation: *Podcasting in Computing-Using Sci-Comm to Broaden Participation*, ACM Richard Tapia Celebration on Diversity in Computing Conference, September 19, 2019, San Diego, CA.
5. Pollock, M., Sarang-Sieminski, A., Abrams, L., Pinder-Grover, T., **Waisome, J.A.M.** (2019). Workshop presentation: *Diversity, Equity, and Inclusion 200*, American Society for Engineering Education Annual Conference and Exposition, June 17, 2019.
6. Pollock, M., Sarang-Sieminski, A., Litzler, L., Abrams, L., Hendricks, D., **Waisome, J.A.M.** (2019). Workshop presentation: *Diversity, Equity, and Inclusion 100*, American Society for Engineering Education Annual Conference and Exposition, June 17, 2019.
7. Wilder, J., **Waisome, J.A.M.**, McMullen, K. (2019). Workshop presentation: *Modern Figures Podcast: The Importance of Visibility, Inspiration, and Aspiration*, May 15, 2019, Nashville, TN.
8. **Waisome, J.A.M.**, Laurenceau, I., and Gilbert, J.E. (2018). Roundtable discussion: *Creating Academic Spaces for Social Justice and Advocacy Research and Practice to Flourish*. Presented at the International Conference on Urban Education (Social Justice and Advocacy Strand). Nassau, Bahamas.
9. **Waisome, J.A.M.**, McMullen, K., Anderson, M.H., Jackson, J.F.L., and Gilbert, J.E. (2018). Panel discussion: *iAAMCS Guidelines for Successfully Mentoring Black/African-American Computing Sciences Ph.D. Students*, ACM Richard Tapia Celebration of Diversity in Computing Conference, September 21, 2018, Orlando, FL.
10. **Waisome, J.A.M.**, McMullen, K., and Gilbert, J.E. (2018). Workshop presentation: *Tools for Navigating the Graduate School Process*, GEM 2018 Annual Board Meeting and Conference, September 14, 2018, Los Angeles, CA.
11. **Waisome, J.A.M.**, Matthews, E.A., Williams, A., Alikhademi, K, Prioleau, D. (2018). *Research Applications of Virtual and Augmented Reality Developed by the Human Experience Research Lab*, Cade Visiting Inventor Series, March 15, 2018, Gainesville, FL.
12. **Magruder, J.A.**, Hernando, D., Zou, J., and Roque, R. (2016). Poster presentation: *Localized Debonding as a Potential Mechanism for Near-Surface Cracking*. Presented at the Engineering School for Sustainable Infrastructure and Environment (ESSIE) Poster Symposium, Gainesville, FL.
13. **Magruder, J.A.**, Hernando, D., Lopp, G., Roque, R. (2016). Poster presentation: *Evaluation of Asphalt Layer Interface Breakdown Under Repeated Shear*. Presented at the Association for Asphalt Paving Technologists Conference, Indianapolis, IN.

14. **Magruder, J.A.**, and Roque, R. (2015). Poster presentation: *Evaluation of Asphalt Layer Interface Resistance to Bond Degradation Through Repeated Load*. Presented at the Academic Research and Leadership Network Symposium, Anaheim, CA.

TEACHING EXPERIENCE:

Courses

Spring	2021	Learning and Teaching in Engineering, Department of Engineering Education, Herbert Wertheim College of Engineering, UF Engineering, Design, and Society, Department of Engineering Education, Herbert Wertheim College of Engineering, UF
Fall	2020	Learning and Teaching in Engineering, Department of Engineering Education, Herbert Wertheim College of Engineering, UF
Summer	2019	Graduate Seminar, UF Board of Education Summer Fellowship Program, The Graduate School, UF
Spring	2019	Learning and Teaching in Engineering, Department of Engineering Education, Herbert Wertheim College of Engineering, UF

New Course Development

2018	2019	Learning and Teaching in Engineering, Institute for Excellence in Engineering Education, Herbert Wertheim College of Engineering, UF
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SERVICE:

University Service

2020	- Present	UF General Education Committee
2020	- Present	The National Alliance for Inclusive & Diverse STEM Faculty (Aspire) Institutional Change Initiative (iChange) UF Leadership Team Member
2019		UF Office of Graduate Diversity Initiatives Director Search Committee Member
2018	- 2019	2019 NAMEPA Training Institute Planning Committee Co-chair
2016	- Present	UF Diversity and Academic Inclusion Group Member
2014	- Present	UF Ronald E. McNair Scholars Program Advisory Council Member

Herbert Wertheim College of Engineering Service

2021 - Present Artificial Intelligence Committee Member

EED Department Service

2020 - Present Ph.D. Program Committee Member

Ph.D. Supervisory Committees

2020 - Present Marah Berry, Department of Environmental Engineering Sciences

Professional Service and Society Membership

2020 - Present Professional Skills Division Chair, American Society for Engineering Education Southeastern (ASEE-SE) Section

2020 Served as an NSF Reviewer (Ad-Hoc)

2019 - 2020 Professional Skills Division Vice Chair, American Society for Engineering Education Southeastern (ASEE-SE) Section

2019 - Present Website Implementation Consultant for the National Academies of Science, Engineering, and Medicine Committee on The Science of Effective Mentoring in Science, Technology, Engineering, Medicine, and Mathematics (STEMM)

2019 Reviewer for the IEEE Conference on Research in Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)

2019 Reviewer for the IEEE Frontiers in Education Conference

2018 - 2019 Civil Engineering Division Chair, American Society for Engineering Education Southeastern (ASEE-SE) Section

2018 Moderator for Pre-K-12 Best Practices Track, 2018 International Conference on Urban Education, November 2018, Nassau, Bahamas

2018 Served as an NSF Reviewer

2018 Served as an NSF Reviewer (Ad-Hoc)

2018 Served as a reviewer for the IEEE Frontiers in Education Conference

2018 Served as a reviewer for the ASEE Southeast Conference

- 2018 Served as a reviewer for the Association of Computing Machinery (ACM) Richard Tapia Celebration of Diversity in Computing Conference
- 2018 Served as a reviewer for the ASEE Committee on Diversity Equity and Inclusion
- 2017 Moderator for American Society for Engineering Education Conference and Exhibition, June 2017, Columbus, OH.
- 2017 Served as a reviewer for the ASEE Committee on Diversity Equity and Inclusion
- 2017 - 2020 Member, Association for Computing Machinery
- 2015 - Present Member, ASEE (Professional Member 2018-Present)
- 2004 - Present Member, NSBE (Professional Member 2017-Present, UF Chapter Advisor 2010-Present)

FELLOWSHIPS/HONORS/AWARDS:

- 2018 Mike Shinn Distinguished Member of the Year – Female Recipient, National Society of Black Engineers
- 2017 Edward A. Bouchet Graduate Honor Society Inductee
- 2016 Office of Research Travel Award Recipient, UF Graduate School
- 2015 Academic Research and Leadership Symposium
- 2013 Graduate Student Outstanding Service/Leadership Award in Civil and Coastal Engineering Recipient, UF
- 2013 UF NSF South East Alliance for Graduate Education and the Professoriate Award Recipient
- 2011 Defense Threat Reduction Agency Student Research Associate Program II Award Recipient
- 2010 NSF Bridge to the Doctorate Fellowship Recipient
- 2010 UF Graduate Student Fellowship Recipient
- 2010 Florida Board of Education Summer Fellowship Recipient

- 2010 UF Hall of Fame Inductee
- 2010 UF Outstanding Leadership Award Recipient

OTHER EXPERIENCES:

Professional Development/Training

- 2020 Developing and Modeling Growth Mindsets in STEM and Beyond, Facilitated by Dr. Diana Bowen, Florida-Caribbean Louis Stokes Regional Center of Excellence
- 2019 From Identity to Impact: A Capacity Building Workshop for Engineering Education Professionals, Facilitated by Dr. Jeremi London
- 2019 Launching Academics on the Tenure-Track: An Intentional Community in Engineering (LATTICE) 2019 Cohort, University of Washington ADVANCE Center for Institutional Change
- 2018 UF Center for Instructional Technology and Training Course Mapping Camp
- 2012 North Star Imaging Training – Industrial X-Ray Computed Tomography System and software (X-View CT, FXE-Control)
- 2011 Scanning Electron Microscopy Training (EMA 6507L)

Mentoring Program Support

- 2012 - 2017 UF Ronald E. McNair Scholars Program STEM Student Peer Advisor
- 2012 UF Office of Graduate Diversity Initiatives Florida Board of Education Summer Fellowship Peer Advisor
- 2011 UF Howard Hughes Medical Institute Science for Life - Summer Research Experience for Rising Seniors Peer Mentor